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### RICHLAND CENTER MUNICIPAL UTILITIES

P.O. Box 312 RICHLAND CENTER, WISCONSIN 53581

December 17, 2002

Mr. Scot Cullen, Chief Electric Engineer Public Service Commission 610 N. Whitney Way P.O. Box 7854 Madison, Wisconsin 53707-7854

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and Maintenance, PSC Rule 113.0607(6)

Dear Mr. Cullen:

Enclosed for filing are 3 copies of Richland Center Electric Utility's Report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan.

Very truly yours,

Richard L. Dosch

Electric Superintendent

RLD:jl Enclosures

REGEIVED

Electric Division

# TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTIVE MAINTENANCE PLAN

## RICHLAND CENTER ELECTRIC UTILITY

FILING DEADLINE FEBRUARY 1, 2003

**DECEMBER 17, 2002** 

RICHARD L. DOSCH 450 S. MAIN STR. RICHLAND CENTER, WI 53581 (608) 647-3844

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Electric Division

#### COMPLIANCE WITH PREVENTIVE MAINTENANCE PLAN 2003 REPORT

#### TRANSMISSION

The Richland Center Electric Utility currently owns four miles of 69KV transmission line. Alliant Energy has leased and maintained this line in the past two years and on November 26, 2002 gave written notice of cancellation. Under the terms of the agreement, the agreement will terminate on their anniversary date with two-years written notice. The utility is currently negotiating with ATCo on the disposition of this line.

#### SUBSTATION MAINTENANCE

The Richland Center Electric Utility currently owns one substation located in the 600 block of South Main Street and is named James E. Olson substation. The transformer is inspected and evaluated annually by the firm of High Voltage Diagnostics Inc. The latest report was 9/05/02 stating that the substation is in very good operating condition.

A monthly inspection, with the form prepared by the MEUW for PSC rule 113.0607, is done each month at the regular scheduled meter reading date. The first inspection was completed on 2/06/01 and has been done monthly to the current date. Minor problems have been found such as trash thrown in the substation, the need for respraying certain

portions of the substation for weeds, minor internal low voltage wiring repair in the switchgear enclosure and removing bird nests from the transformer cooling fins. These problems are either taken care of when discovered or within a two week time period. The inspection will continue monthly on the scheduled meter reading dates.

#### OVERHEAD DISTRIBUTION CIRCUITS

During the winter and early spring of 2001 the Richland Center Electric Utility tagged all distribution poles and added them to our mapping. At this time a RFI and visual inspection was done on the entire overhead system. The utility found two suspect poles, two blown high voltage lightning arresters, approximately 100 missing or damaged pole ground moldings and dozens of missing or damaged guy wire guards. The problems were all repaired on a weekly basis as they were submitted to the line crew. Utility employees continue overhead inspections on their daily work assignments and make the repairs as needed. The utility has a goal of doing another 100% overhead system inspection in the winter/spring of 2004.

#### **UNDERGROUND FACILITIES**

For the last two summers the utility has been converting areas of overhead distribution to underground in residential areas, which will continue in 2003 and 2004. Although a full-scale inspection of underground facilities has not begun the line crew employees do visual inspections whenever they open a padmount transformer or high voltage pedestal. All urd risers were inspected in the overhead inspections. The utility has purchased an infrared tool and it is our goal to open all urd installations for inspection within the next two summers. An inspection sheet will be filled out at each installation and includes the following:

- 1. Date of inspection
- 2. Location
- 3. Infrared test results

- 4. RFI test results
- 5. Decals & sign conditions
- 6. Locks and locking devices
- 7. Surrounding (level, accessibility, ground conditions, etc)
- 8. Overall conditions

The inspection sheet will also include findings, critical needs to repair any findings, and date when repairs are made.

#### OVERALL CONDITION OF THE UTILITY

Over the past two years 100% of the overhead inspection has been accomplished, annual substation testing has been completed, and monthly substation inspections have been met. All items found in need of repair or replacing have been taken care of before they attributed to any outages to our customers. Storm related outages have been minimal. We have lost three small distribution transformers to lightning resulting in two short outages to a combined total of 10 customers. I would estimate that 20% of our underground system is new and our goal is to have 100% inspection of underground equipment by 1/01/05. Our distribution facilities on a whole are in excellent condition due to recent distribution conversions, re-locating of lines due to road construction and building construction and conversions from overhead to underground.

#### FUTURE GOALS

In the spring of 2003 the utility plans on replacing all underground 15kv cable in the South Industrial Park. This is open concentric cable, which was installed in the early 1970's and although we have had no outages on this line a recent inspection showed some signs of corroding neutral. A jacketed cabled would be installed.

For future reliability the Utility can see the need for another substation or a larger transformer in the substation we lease from Alliant Energy. Forster Engineering is currently doing a system study to advise us on how to bolster our back-up reliability. They will also recommend areas where circuit ties, switches and construction for loop feeds may be needed.

I hope this document is what the PSC is looking for, compliance with the preventative maintenance plan. If not, please let me know and I will add whatever it takes.

Submitted by:

Richard L. Dosch

Electric Superintendent

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Richland Center Utilities